# Whole-PhD Support in Instrumentation

IF Report, Key Challenge IF-2: "Develop and maintain the critical and diverse technical workforce"

**Current Support Mechanisms** 

#### Direct to students:

- SCGSR (~150 awards/year)
  - 0.25-1 year, @ nat'l lab
- Traineeships (O(10)/year)
  - 1-2 years, @ specific universities (in CA, MI, ...)
- GIRA (~2 fellows / year)
  - 1-3 years, @ nat'l lab

#### **Focus is short-term support**

Through Pls:

- Base grant
  - Physics Frontiers limited R&D
  - Det R&D limited \$\$, emphasis on generic R&D
- Project/Operations
  - Limited scope for student support

1 full student on R&D "is excessive for base funding award" (panel review)

# Whole-PhD Support in Instrumentation

IF Report, Key Challenge IF-2: "Develop and maintain the critical and diverse technical workforce"



IF Report, Key Challenge IF-4: "Expand and sustain support for blue-sky R&D, small-scale R&D, and seed funding."

Blue-sky R&D organically brings instrumentation training into the whole PhD experience.

Many of our leaders and rising stars in neutrino, rare process, QIS and dark matter detection enjoyed this sort of PhD

## Whole-PhD Support in Instrumentation

**Potential Support Mechanisms** 

#### Direct to students:

- GIRA (3 years support)
  - Expand program (10+ awards per year)
  - Extend to students doing work at Universities

### Through PIs:

- Blue-sky / small-scale / seed funding
  - Expect to support whole
    PhDs in these projects

Keep in mind: PhD students ...

...come in discrete units

...come through Universities